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ENVIRONMENTAL PROTECTION AGENCY

40 CFR Part 52

[EPA-R09-OAR-2011-0547; FRL-9480-1]

Revisions to the California State Implementation Plan, San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD)

**AGENCY:** Environmental Protection Agency (EPA).

**ACTION:** Final rule.

**SUMMARY:** EPA is finalizing approval of revisions to the San Joaquin Valley Air Pollution Control District (SJVUAPCD) portion of the California State Implementation Plan (SIP). These revisions were proposed in the Federal Register on July 11, 2011 and concern volatile organic compound (VOC), oxides of nitrogen (NOx), and particulate matter (PM) emissions from open burning. We are approving a local rule that regulates these emission sources under the Clean Air Act as amended in 1990 (CAA or the Act).

**EFFECTIVE DATE:** This rule is effective on [Insert date 30 days from the date of publication in the Federal Register].

**ADDRESSES:** EPA has established docket number EPA-R09-OAR-2011-0547 for this action. Generally, documents in the docket for this action are available electronically at

<http://www.regulations.gov> or in hard copy at EPA Region IX, 75 Hawthorne Street, San Francisco, California. While all documents in the docket are listed at <http://www.regulations.gov>, some information may be publicly available only at the hard copy location (e.g., copyrighted material, large maps, multi-volume reports), and some may not be available in either location (e.g., confidential business information (CBI)). To inspect the hard copy materials, please schedule an appointment during normal business hours with the contact listed in the **FOR FURTHER INFORMATION CONTACT** section.

**FOR FURTHER INFORMATION CONTACT:** Rynda Kay, EPA Region IX, (415) 947-4118, [kay.rynda@epa.gov](mailto:kay.rynda@epa.gov).

**SUPPLEMENTARY INFORMATION:** Throughout this document, "we," "us" and "our" refer to EPA.

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### **I. Proposed Action**

On July 11, 2011 (76 FR 132), EPA proposed to approve the following rules into the California SIP.

Local Agency	Rule #	Rule Title	Adopted	Submitted

Local Agency	Rule #	Rule Title	Adopted	Submitted
SJVUAPCD	4103	Open Burning	04/15/10	04/05/11
SJVUAPCD		Table 9-1, Final Staff Report and Recommendations on Agricultural Burning	05/20/10	04/05/11

We proposed to approve these rules because we determined that they complied with the relevant CAA requirements. Our proposed action contains more information on the rules and our evaluation.

## **II. Public Comments and EPA Responses**

EPA's proposed action provided a 30-day public comment period. During this period, we received comments from the following party.

1. Sarah Jackson, Earthjustice; letter and e-mail dated and received August 10, 2011.

The comments and our responses are summarized below.

**Comment #1:** Earthjustice commented on the meaning of reasonably available control measures (RACM) under section 172(c)(1) of the CAA, noting that "EPA has interpreted 'reasonably available' to be a measure that is 'technologically and economically feasible and can be readily implemented.'" Earthjustice further asserted that "economic feasibility

considers more than simply affordability and the cost-benefit ratio" and that "Congress intended RACM to be applied as those measures became available."

**Response #1:** We agree that RACM under section 172(c)(1) incorporates considerations of technical and economic feasibility. We note, however, that, "Congress provided EPA and States a great deal of deference for determining what measures to include in an attainment plan" under CAA section 172(c)(1) and that "[b]y including language in Section 172(c)(1) that only 'reasonably available' measures be considered for RACT/RACM, and that implementation of these measures need be applied only 'as expeditiously as practicable,' Congress clearly intended that the RACT/RACM requirement be driven by an overall requirement that the measure be 'reasonable.'" 72 FR 20610 (April 25, 2007).

**Comment #2:** Earthjustice asserted that, "[t]he District's RACM determination is flawed because it applies a feasibility test that is inconsistent with EPA guidance and CAA standards." In particular, Earthjustice argued that the "10 percent of the crop category's net profits" test used by District "fails to analyze whether an alternative is technologically or economically feasible." Earthjustice suggested that the District should conduct a more comprehensive economic analysis taking into

consideration how the costs of alternatives to open burning will impact production, employment, competition, and prices.

**Reponse #2:** As an initial matter, we disagree with the commenter that the District has made a "RACM determination" with respect to Rule 4103. The District has provided an assessment of the economic and technical feasibility of potential control measures for this source category, which EPA has evaluated to determine whether additional controls for this source category might be reasonably available for implementation in the area. As stated in the TSD for our proposal, EPA will take action in separate rulemakings on the State's RACM demonstration for the relevant NAAQS based on an evaluation of the control measures submitted as a whole and their overall potential to advance the applicable attainment dates in the SJV.

We disagree that the District's feasibility test is inconsistent with the CAA or EPA guidance. Neither the CAA nor EPA's implementing regulations define "technical and economic feasibility" for purposes of determining what control measures are "reasonably available," and, as noted above, section 172(c)(1) provides considerable deference to States' determinations of what control measures are reasonably available.

In this case, the District assessed the availability of

alternatives to open burning by evaluating both technological and economic feasibility. *See, e.g.* Staff Report §1.2. For those crop categories for which it found a technically feasible alternative to burning, the District assessed economic feasibility by comparing the per-acre costs for the alternative to the per-acre net profit for that category. *Id.* §1.2.2. Where an alternative's cost exceeded ten percent of profits, the District found the alternative to be economically infeasible. *Id.* Table 9-1. As explained by the District "[t]he 10 percent threshold utilized in this analysis represents the economic significance level generally utilized by the District in the development of District rules, and represents the level that a regulatory action would pose a significant economic impact to affected sources." *Id.* §1.2.2.

As we have previously noted, looking at the percent of profits can provide useful information concerning the economic feasibility of particular control measures. *See, e.g.,* 75 FR 2082. Although we encourage the District to conduct further economic analysis of the feasibility of alternatives to open burning, we also recognize that resource constraints limit the amount of analysis that the District can perform.

We also note that our evaluation of the stringency of

the rule does not rest solely upon the District's assessment of economic and technical feasibility, but also takes into consideration other indicators of technical and economic feasibility. See 72 FR 20614 ("in reviewing the State's selection of measures for RACM. . . EPA may independently supplement the rationale of the State . . ."). For example, as noted in the TSD, we compared the control requirements in Rule 4103 with analogous rules in other local districts and states and concluded that Rule 4103 was as stringent as or more stringent than those other rules. We have not received any information to undermine this conclusion. As such, we continue to believe that Rule 4103 requires all control measures that have been demonstrated to be "reasonably available" for open burning activities in the San Joaquin Valley.

**Comment #3:** Earthjustice referred to a letter indicating that the District will no longer permit open burning of citrus orchard removals "when case-by-case analysis indicates sufficient biomass plant capacity and the availability of economically feasible chipping services." Earthjustice argued that "[s]uch Director's discretion is not approvable into the SIP."

**Response #3:** The District has not submitted these additional restrictions on open burning for approval into the

SIP, and we therefore do not need to evaluate their approvability, and do not rely on them for our approval of Rule 4103.

**Comment #4:** Earthjustice argued that, "Even if EPA finds the District's percent of profits test is a sufficient means of demonstrating economic infeasibility to reject potential RACM controls, EPA should reject the proposed rule because the District's application of this test is flawed."

**Response #4:** As noted above, we have considered other factors in addition to the District's "percent of profits" test in assessing the technical and economic feasibility of potential RACM controls. Nonetheless, Earthjustice's specific points regarding the District's application of the percent of profits are addressed below.

**Comment #4.a:** Earthjustice noted that "the District calculated the cost of compliance 'after tax' without accounting for tax implications of increased control costs" and asserted that "[t]his failure to adjust the cost estimates precludes any meaningful analysis of costs."

**Response #4.a:** District staff explained that their calculations followed "EPA and ARB established methodologies." Additionally, District staff clarified that, "the primary costs



associated with potential alternatives to open burning result from service costs, such as through the hiring of chipping and hauling services. The District does not expect tax implications associated with these non-capital expenditures, if any, to impact the cost analyses associated with this project."<sup>1</sup> We are not aware of any information that contradicts the District's assessment in this regard.

**Comment #4.b:** Earthjustice commented that, "the District uses a 10-year cost amortization schedule without providing a rational basis for this term of years." Earthjustice argued that this assumption underestimates the lifespan of the vineyards and orchards and therefore produces artificially high annual cost figures.

**Response #4.b:** In response to this comment, District staff noted that Appendix H to the Staff Report provided information on the productivity over time of specific crops. District staff also listed numerous reasons for assuming a 10-year amortization schedule that were provided when this issue was raised at a California Senate Hearing including, for example:

1. 10-year analysis is used to standardize comparisons across various source categories (Example: 10-year analysis is

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<sup>1</sup> Email from Koshoua Thao, SJVUAPCD, to Rynda Kay, EPA, September 22, 2011.

also used for boilers, engines, and other source categories with real life spans in excess of 20-30 years).

2. Standard 10-year analysis is used by the California Air Resources Board and air districts for evaluating air pollution control economics.

3. Farms can change owners and change crops fairly frequently: For farms, periods longer than 10-years are speculative since farm viability is subject to global market forces, weather, water availability, etc.<sup>2</sup>

**Comment #4.c:** Earthjustice contended that the District "inserted baseless assumptions to inflate the claimed costs. For example, the District assumes citrus root removal material must be separated from the tree material and transported to a composting facility at an additional cost of \$244 per acre." Earthjustice claimed that, contrary to this assumption, biomass facility operators have indicated that roots can be chipped and transported to biomass facilities along with the rest of the chipped material. Similarly, Earthjustice asserted that the evidence in the record undermines the District's suggestion that grinding and hauling material to a biomass plant may not be technically feasible.

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<sup>2</sup> *Id.*

**Response #4.c:** We acknowledge some uncertainty about the cost of citrus root removal and disposal. According to District staff, "the root removal process is independent from the chipping and biomass operations." Staff Report Appendix D at D-34. The District explains, "Citrus is often grown in clay-like soil that adheres to its roots" and "biomass power plant operators will not accept any organic material with dirt or other unburnable contaminants"<sup>3</sup>. We do not dispute that biomass facilities have indicated that roots can be chipped and transported to biomass facilities, but we are not aware of any other evidence to support this claim and demonstrate that root chipping and biomass burning is reasonably available. This appears to be an evolving area and we encourage the District to reexamine whether it may be possible to send some or all citrus roots to biomass rather than landfill or compost. Nonetheless, at this time, we do not have sufficient specific evidence to challenge the District's assumption in this regard.

**Comment #4.d:** Earthjustice argued that "[t]he District's allowance for walnut, almond, and pecan growers whose total nut acreage is less than 3,500 acres to burn 20 acres of prunings, plus an additional unrestricted amount if certain conditions are

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3 *Id.*

met, blatantly disregards any economic feasibility analysis."

**Response #4.d:** We disagree that this allowance disregards any economic feasibility analysis. The District found that the cost of shredding up to 20 acres at once was not economically feasible and that shredding 20-plus acres was feasible only when a custom shredder was available. See Staff Report §3.7.3. As a result, the District adopted an automatic 20 acre allowance plus a discretionary allowance depending on contractor availability.

**Comment #5:** Earthjustice contended that additional reductions are reasonably available under the appropriate feasibility analysis. The specific arguments raised by Earthjustice in support of its contention are addressed below.

**Comment #5.a:** Earthjustice argued that the proposed alternative to open burning of citrus orchard removal materials (grinding and hauling orchard removal materials to a biomass plant) is technically feasible because the biomass power plants that use San Joaquin Valley agricultural waste are physically capable of handling the 54,035-ton increase in material that would be caused by a total prohibition on burning citrus orchard removals.

**Response #5.a:** We agree that it is technically feasible to grind and haul orchard removal materials to a biomass plant. It

is less clear, however, whether it is economically feasible. Even assuming that there is currently sufficient capacity for citrus removal materials at biomass facilities, the District has concluded that "reliance on biomass facilities as a primary, long-term alternative method to open burning is not possible since there are no long-term federal or state funding commitments for the biomass facilities . . . ." Staff Report at 7-50. In addition, the Staff Report notes that, since urban waste is typically less expensive than agricultural waste, urban waste (particularly construction debris) may displace some of the current capacity for agricultural waste, as the economy improves and construction activity increases. *Id.* at 7-49. Additionally, the District explains that "citrus material is typically less desirable" than other biomass materials<sup>4</sup> and must be blended with other biomass fuels. Staff Report at 7-37.

In light of this economic uncertainty, EPA has recommended that the District continue closely monitoring the economic feasibility of sending citrus orchard removal material to biomass. In response, the District has agreed to ban the burning of citrus orchards "on a case-by-case basis when analysis indicates sufficient biomass capacity and the availability of

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<sup>4</sup> *Id.*

economically feasible chipping services.”<sup>5</sup> We believe that this interim step will have significant air quality benefits and we encourage the District to consider whether a complete or partial ban on citrus orchard burning is economically feasible.

Nonetheless, we continue to believe that such a ban has not been demonstrated to be economically feasible at this time.

**Comment #5.b:** Earthjustice claimed that the proposed alternative to open burning of almond, walnut and pecan prunings (shredding the prunings and leaving the materials on the orchard floor) is technically feasible.

**Response #5.b:** As with the previous comment, we agree that this is technically feasible, but not that it has been shown to be economically feasible at all times. The District concluded that, although shredding is a technically feasible alternative to open burning, there is an insufficient supply of custom shredding services available to smaller farms. Staff Report Appendix D at D-36. EPA believes this is a reasonable conclusion based on historical data. However, as noted in the TSD, we recommend that the District reevaluate the availability of contractors to shred nut prunings based on updated data.

**Comment #5.c:** Earthjustice claimed that these proposed

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<sup>5</sup> See letter dated June 27, 2011, from Seyed Sadredin to Deborah Jordan.

alternatives to open burning of citrus orchard removal materials and almond, walnut and pecan prunings are also economically feasible.

**Response #5.c:** The District's economic analysis indicated that sending citrus removal materials to biomass was not economically feasible. Staff Report Table 3-4. Similarly, the District's economic analysis indicated that the cost of shredding prunings from less than 25 acres at once was not economically feasible. For the reasons noted above (see responses 4c, 4d, and 5a) and given that no other agency has adopted more stringent restrictions on open burning than those currently in place in the District, we believe these conclusions are reasonable at this time. However, we encourage the District to reevaluate these postponements to ensure that the State adopts all RACM for open burning activities as expeditiously as practicable.

### **III. EPA Action**

No comments were submitted that change our assessment that the submitted rules comply with the relevant CAA requirements. Therefore, as authorized in section 110(k)(3) of the Act, EPA is fully approving these rules into the California SIP.

### **IV. Statutory and Executive Order Reviews**

Under the Clean Air Act, the Administrator is required to approve a SIP submission that complies with the provisions of the Act and applicable Federal regulations. 42 U.S.C. 7410(k); 40 CFR 52.02(a). Thus, in reviewing SIP submissions, EPA's role is to approve State choices, provided that they meet the criteria of the Clean Air Act. Accordingly, this action merely approves State law as meeting Federal requirements and does not impose additional requirements beyond those imposed by State law. For that reason, this action:

- is not a "significant regulatory action" subject to review by the Office of Management and Budget under Executive Order 12866 (58 FR 51735, October 4, 1993);
- does not impose an information collection burden under the provisions of the Paperwork Reduction Act (44 U.S.C. 3501 et seq.);
- is certified as not having a significant economic impact on a substantial number of small entities under the Regulatory Flexibility Act (5 U.S.C. 601 et seq.);
- does not contain any unfunded mandate or significantly or uniquely affect small governments, as described in the Unfunded Mandates Reform Act of 1995 (Public Law 104-4);



- does not have Federalism implications as specified in Executive Order 13132 (64 FR 43255, August 10, 1999);
- is not an economically significant regulatory action based on health or safety risks subject to Executive Order 13045 (62 FR 19885, April 23, 1997);
- is not a significant regulatory action subject to Executive Order 13211 (66 FR 28355, May 22, 2001);
- is not subject to requirements of Section 12(d) of the National Technology Transfer and Advancement Act of 1995 (15 U.S.C. 272 note) because application of those requirements would be inconsistent with the Clean Air Act; and
- does not provide EPA with the discretionary authority to address disproportionate human health or environmental effects with practical, appropriate, and legally permissible methods under Executive Order 12898 (59 FR 7629, February 16, 1994).

In addition, this rule does not have tribal implications as specified by Executive Order 13175 (65 FR 67249, November 9, 2000), because the SIP is not approved to apply in Indian country located in the State, and EPA notes that it will not impose substantial direct costs on tribal governments or preempt tribal law.

The Congressional Review Act, 5 U.S.C. 801 et seq., as added by the Small Business Regulatory Enforcement Fairness Act of 1996, generally provides that before a rule may take effect, the agency promulgating the rule must submit a rule report, which includes a copy of the rule, to each House of the Congress and to the Comptroller General of the United States. EPA will submit a report containing this action and other required information to the U.S. Senate, the U.S. House of Representatives, and the Comptroller General of the United States prior to publication of the rule in the Federal Register. A major rule cannot take effect until 60 days after it is published in the Federal Register. This action is not a "major rule" as defined by 5 U.S.C. 804(2).

Under section 307(b)(1) of the Clean Air Act, petitions for judicial review of this action must be filed in the United States Court of Appeals for the appropriate circuit by [FEDERAL REGISTER OFFICE: insert date 60 days from date of publication of this document in the Federal Register]. Filing a petition for reconsideration by the Administrator of this final rule does not affect the finality of this action for the purposes of judicial review nor does it extend the time within which a petition for judicial review may be filed, and shall not postpone the

effectiveness of such rule or action. This action may not be challenged later in proceedings to enforce its requirements (see section 307(b)(2)).

List of Subjects in 40 CFR Part 52

Environmental protection, Air pollution control, Incorporation by reference, Intergovernmental relations, Nitrogen dioxide, Ozone, Particulate matter, Reporting and recordkeeping requirements, Volatile organic compounds.

Dated: September 30, 2011. Jared Blumenfeld,  
Regional Administrator,  
Region IX.

Part 52, Chapter I, Title 40 of the Code of Federal Regulations is amended as follows:

PART 52 [AMENDED]

1. The authority citation for Part 52 continues to read as follows:

**AUTHORITY:** 42 U.S.C. 7401 et seq.

Subpart F - California

2. Section 52.220 is amended by adding paragraphs (c)(388)(i)(B)(2), (3), (4) and (5) to read as follows:

§52.220 Identification of plan.

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(c) \* \* \*

(388) \* \* \*

(i) \* \* \*

(B) \* \* \*

(2) Rule 4103, "Open Burning," amended on April 15, 2010, not effective until June 1, 2010.

(3) Table 9-1, Revised Proposed Staff Report and Recommendations on Agricultural Burning, approved on May 20, 2010.

(4) San Joaquin Valley Air Pollution Control District, Resolution No. 10-05-22, adopted on May 20, 2010.

(5) California Air Resources Board, Resolution 10-24, adopted on May 27, 2010.

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[FR Doc. 2011-33660 Filed 01/03/2012 at 8:45 am; Publication Date: 01/04/2012]